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ABSTRACT

This paper presents the Aging Sexuality Knowledge and Attitudes Scale (ASKAS), an instrument designed to assess the particular aspects of sexual knowledge and attitudes as they relate to the aged. Development of ASKAS items from a survey of existant physiological research on sexuality in older adults and a review of social-psychological writing on aged sexuality is described. Unique features of the ASKAS are discussed, including its focus on issues of the aged, the contexts of aged persons, and the sexual changes unique to the aged. The ASKAS format is described and administration and scoring procedures are given. Reliability data is presented from studies which used the ASKAS with aged persons, families of aged persons, and persons who work with the aged. The findings are discussed, supporting the validity and reliability of the scale in assessing sexual attitudes and knowledge with specific reference to the aged. Studies are cited which report significant changes in scale scores following intervention, and significant relationships of sexual behavior to scale scores which follow predicted directions. A factor analysis is presented that supports the two dimensions of attitudes and knowledge. A copy of the ASKAS is included with correct answers given for knowledge items. (Author/NRB)

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A Scale for the Assessment of Attitudes and Knowledge Regarding Sexuality in the Aged

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A Scale for the Assessment of Attitudes and Knowledge Regarding Sexuality in the Aged

Human sexuality in old age has become a subject for gerontologists in dealing with social myths regarding aging, myths which seem to deny aged persons their humanity and a sense of sexual normality. In western society sexuality in the aged is dominated by irrational fears, stereotypical thinking, and a lack of knowledge (Cameron, 1970; Comfort, 1976; Golde & Kogan, 1959). Blythe (1979) wrote that, "The hope that sexuality itself would wither away and not add its desperate frustrations to agedness has long since been turned into the quite unfounded assurance that, with age, we naturally become asexual" (p. 7).

The developing literature on sexuality and aging indicates that while frequency of sexual activity may show some decline with advanced age, there is no clear age-related ending to sexual behavior (Newman & Nichols, 1960; Verwoerdt et al., 1969; Pfeiffer et al., 1968). Particularly, there is no clear ending to sexual behavior which is not best explained by variables other than age, e.g., social circumstance, attitudes of significant others, and ill health. Calderone (1976) wrote, "Clinical experience suggests that although some sex problems are directly related to organic and psychiatric illness, the etiology of the great majority is a vicious circle of sexual fear, ignorance, and misplaced quilt" (p. 35). Indeed, several studies support the conclusion that many aged continue to have sexual interests and remain sexually capable, if not always active (Kinsey et al., 1948a; Kinsey et al., 1948b; Masters & Johnson, 1966; 1970).

The present paper is not about sexuality and aging per se, but rather deals with the development of an instrument for assessing the attitudinal

aspects of sexuality in the aged and the individual's knowledge about age related changes in sexual functioning. The assumption here is that many sexual problems are a result of attitudinal and knowledge factors. Annon and Robinson (1978) have indicated in their therapeutic model for the treatment of sexual concerns that sexual attitudes and knowledge are an important source of sexual cognitions which may be dysfunctional to individual sexual functioning. Masters and Johnson (1970) have indicated that there are special sexual changes related to aging, the ignorance of which may influence sexual behavior.

The Aging Sexual Knowledge and Attitudes Scale (ASKAS) represents an instrument for the assessment of sexual cognitions related to the aged. In order to assess such particular attitudinal and knowledge factors and their potential impact upon sexual functioning in the aged there is a need for a measuring instrument possessing reliability and validity. Validity here is minimally defined as the ability to discriminate between groups and individuals who differ in terms of sexual attitudes and sexual knowledge. Thus, such an instrument ought to differentiate, for example, the sexually active from the non-active, and those who have participated in a sex education program from those who have not.

While there is a scale, the Sexual Knowledge and Attitude Test (SKAT), developed for assessing the general sexual knowledge and sexual attitudes of medical students, the issues regarding sexuality in the aged consist of one question with three others referring to middle age and beyond (2 of which relate to sexuality post-menopause and hence not dealing with sexuality in the aged per se) (Leif & Karlen, 1976). Current research on sexuality in the aged simply must utilize measurement devices which are not

specific to the unique sexual concerns of the aged, i.e., general sexual attitudes and knowledge scales, or ad hoc scales lacking demonstrated validity or reliability. However, there are, age related changes in sexual functioning (e.g., slowed response) and social attitudes which differentiate sexually appropriate behavior dependent upon age. An example of the latter would be prejudices against sexuality among the aged, expectations that normal aging includes a dissipating sexual response. Thus, normal sexuality at one age may become sexual deviance at another age (e.g., "The dirty old man").

The present instrument differs from other sexual attitude and knowledge scales in that it focuses exclusively on issues of the aged, on the contexts of aged persons, and the sexual changes unique to the aged. Such is based upon the notion of life-cycle alterations in the social and environmental context, expectations, and physiology of sexuality.

THE ASKAS

The ASKAS is designed for use with older persons, people who work with older persons, and any group of people who are impactful on the aged (e.g., families of the aged, volunteers working with the aged). The questions are designed to measure sexual attitudes and sexual knowledge through the utilization of items dealing with the older age-related changes (and non-changes) in sexuality, and the context of older aged sexuality. The items were developed from a survey of existant physiological research on sexuality in older aged persons (for a review of such research see White, 1981) and a review of social-psychological writing on aged sexuality. The attitude

portion of the test is based on the assumption that attitudes toward sexuality in the context of old age institutions (specifically, the nursing home) are predictive of attitudes toward sexualtiy in the aged in other contexts. The original purpose for the development of the ASKAS was for an N.I.M.H. sponsored study of sexuality in old age institutions. Subsequent research has shown its utility for use as a general measure of attitudes and knowledge regarding sexuality in the aged. Thus, supporting the above assumption involved in item construction.

The ASKAS consists of 61 questions of which 35 are "true - false", "don't know" in response format, and 26 are responded to on a 7 point Likert scale as to the extent of agreement or disagreement with the item statement. The "true - false" questions are knowledge about sexuality in the aged measures, while the agree - disagree Likert scale questions measure attitudes toward sexuality in the aged. Directionality of correct (knowledge) or permissive (attitude) responses ("true - false", "agree - disagree") to the items were counter-balanced. The ASKAS may be given via personal interview or in paper-and-pencil format and lends itself to computer scoring.

Results

Table 1 presents reliability data from studies which ahve utilized the ASKAS. It is of interest to note the slightly higher reliabilities of the knowledge section relative to the attitudes section of the ASKAS. An examination of Table 1 indicates that all reliabilities are within an acceptable range, typically over .85.

Table 2 presents the ASKAS items with the correct answer, in the case of the knowledge questions, in parentheses. The scoring is such that a low score indicates high knowledge, as is also the case with the attitude items. That is, a low score indicates a permissive attitude.

Table 3 contains the means and standard deviations in the various groups which have been administered the ASKAS. These should not be interpreted as normative, but rather are presented simply for comparison purposes. Details of the exact nature of the sample (age, gender and so forth) are presented in the report of the specific studies cited.

Table 1 about here

Table 2 about here

Table 3 about here

The validity of the ASKAS has been examined in several different ways. In a sexual education program for older people, people who work with the aged, and adult family members of aged people (each group exposed to the program separately), White and Catania, (1981) found the following: among the aged experimental group (exposed to a sex education program) ASKAS knowledge scores were significantly different and in the direction of greater knowledge from pre- to post-test, while post-test scores were

significantly higher in the treatment group than were the post-test scores of the control group of aged people. The control group knowledge scores were non-significantly different from pre- to post-test. Similarly, attitude scores in the aged experimental group were significantly more permissive from pre- to post-test, while the attitude post-scores of the experimental group were significantly more permissive than the control group attitude post-test scores. The control group attitude scores from pre- to post-test were non-significantly different. The pre-tests were given 4-6 weeks prior to the education sessions, with the post-tests given 4-6 weeks following the sessions. The educational program lasted for 3 weeks.

Within the persons who work with the aged group (largely staff from various nursing homes) knowledge scores were significantly increased from pre- to post-test in the experimental group; the experimental group knowledge post-scores were significantly greater than the control group knowledge post-scores. There was no significant change in the control group knowledge scores from pre- to post-test. The staff experimental group attitude scores were significantly more permissive from pre- to post-test, while the staff control group showed no significant change in attitude scores. The experimental group attitude post-scores were significantly more permissive than the control group post-scores.

The family experimental group (adult children with aged parents) knowledge scores were significantly greater from pre- to post-test, while the family experimental group knowledge post-test scores were significantly different from the family control group knowledge post scores. The family control group knowledge scores were not significantly different from pre- to

post-test. All changes were in the direction of more knowledge.

The family experimental group attitudes scores were significantly more permissive from pre- to post-test, and family experimental group attitude post-scores were significantly more permissive than the attitude post-scores of the control group. The control group attitude scores were non-significantly different from pre- to post-test. The participants in the above research (White and Catania, 1981) are currently being studied via a two year follow-up which includes administration of the ASKAS.

Hammond (1979) utilized the ASKAS in a sexual education program for professionals working with the aged, and members of community mental health center boards. Her results indicated a significant increase in knowledge scores from pre-test to post-test, while attitude scores were significantly more permissive from pre-test to post-test. The control group scores from pre-test to post-test were not significantly different on either attitudes or knowledge. Additionally, the experimental group knowledge post-scores were significantly different from the control group post-scores, while the two groups were not significantly different on attitudes. A repeated measures statistical analysis, however, indicated that the amount of change in attitudes was significantly more permissive in the experimental group in comparison to the control group, as was also the case in knowledge scores. In contrast to the White and Catania (1981) study, Hammond did not utilize matching variables (education and gender) to assign individuals to control and experimental groups. Hence, her experimental and control groups may represent two different populations. The utilization of change scores (as in a repeated measures analysis) is

thus the appropriate analysis which did yield the predicted significant differences between control and experimental groups in both attitudes and knowledge. White (1981) found that both ASKAS attitude scores and knowledge scores were significantly related to whether an individual was sexually active or not in a study of 15 Texas nursing homes. The relationships were toward increased sexual activity with more permissive attitude scores and with greater knowledge scores.

Table 4 about here

Table 4 presents the varimax factor loadings of a principal components factor analysis combining all the groups reported in Table 3 utilizing pre-test scores. Recalling that items 1 through 35 are hypothesized to be knowledge items and items 36-61 are hypothesized to be attitude items, it can be seen in Table 4 that a two factor solution is a good solution, and that each item loads most heavily on its hypothesized factor membership. Utilizing .35 as a cut-off point, items #1 and 9 in the knowledge factor and items #36, 47, 50, and 51, while loading most heavily in their hypothesized direction, do not clearly distinguish themselves as belonging to either factor. Their continued inclusion in the ASKAS is hence questionable, though they do load most strongly on the appropriate factors. The results of the principal components factor analysis are supportive of the highly positive alpha reliabilities in Table 1 indicating high internal consistency within each of the two factors, and justify their treatment as two separate scores.

Discussion

These findings all suggest that the ASKAS is a reliable and valid measure of knowledge about sexuality and aging and attitudes toward sexuality in the aged. Reliability has been shown both in the sense of internal item homogeneity, as reflected in the Alpha coefficients and the highly positive split-half correlations, and in the test-retest sense, as reflected in highly positive correlations between repeated testings. Validity is indicated in the sensitivity of the ASKAS to experimental educational interventions on the topic of sexuality and aging and the relationship of ASKAS scores to sexual behavior. Such reliability and validity has been shown in several different populations (older persons in the community, nursing home personnel, adult community residing middle-aged persons, and institutionalized older persons).

The ASKAS is objectively scored, demands little or no training in its administration, may be given in either pencil-and-paper format or by personal interview, and is machine scoreable. The terms utilized are non-technical and hence it may be used with any group possessing perhaps a minimum of some high school education. Thus it may be used with current cohorts or older persons whom typically do not have education beyond the high school level.

The instrument lends itself to the study of attitude - knowledge relationships which, in the area of aging sexuality, present fertile ground for educational gerontology. It is of interest in such regard that in a sample of nursing home staff (n=167) the correlation between attitude and knowledge scores was .18 (White, 1979). Further, the ASKAS ought to be

useful to clinicians in working with older persons with sexual dysfunction in determining the cognitive aspects which may be contributing to such dysfunction.

While there are currently many studies of sexuality in the aged, and several efforts at educational intervention (White & Catania, 1981; Hinkley, 1979; Brower & Tanner, 1979; Blackwell & Hunt, 1978) the comparability of the findings of such studies are problematic due to the wide range of measurement devices utilized (if indeed any evaluation is attempted from such educational interventions), and the absence of any reported psychometric properties of the measurement scales where such are utilized.

Footnotes

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[2] The possible range of ASKAS scores are as follows: Knowledge = 35-105; Attitudes = 26-182.

[3] The hypothesized loadings were: 1-35 are knowledge questions, and 36-61 are attitude questions.

[4] All scores reported here are the pre-test scores where both pre-tests and post-tests were administered.

Table 1

ASKAS Reliabilities

Knowledge

Type of Reliability	Reliability Coefficient	Sample Size	Type of Sample
Split-half[a]	.91	163	Nursing Home Staff
Split-half[a]	.90	279	Nursing Home Residents
Alpha	.93	163	Nursing Home Staff
Alpha	.91	279	Nursing Home Residents
Alpha	.92	30	Community Aged
Alpha	.90	30	Nursing Home Staff
Alpha	.90	30	Family of Aged
Test-Retest	.97	15	Community Aged
Test-Retest	.90	30	Staff of Nursing Home & Families of the Aged

Attitudes

Split-half[a]	.86	163	Nursing Home Staff
Split-half[a]	.83	279	Nursing Home Residents
Alpha	.85	163	Nursing Home Staff
Alpha	.76	279	Nursing Home Residents
Alpha	.87	30	Community Aged
Alpha	.87	30	Nursing Home Staff
Alpha	.86	30	Family of Aged
Test-Retest	.96	15	Community Aged
Test-Restest	.72	30	Staff of Nursing Home & Families of the Aged

[a] Indicates these correlations have been corrected for test length

Table 2

Aging Sexual Attitudes and Knowledge Scale

Knowledge Questions: Correct answer shown in ( )

*1. Sexual activity in aged persons is often dangerous to their health.

.1 True (.2) False .3 Don't know

2. Males over the age of 65 typically take longer to attain an erection of their penis than do younger males.

(.1) True .2 False .3 Don't know

3. Males over the age of 65 usually experience a reduction in intensity of orgasm relative to younger males.

(.1) True .2 False .3 Don't know

4. The firmness of erection in aged males is often less than that of younger persons.

(.1) True .2 False .3 Don't know

5. The older female (65+ years of age) has reduced vaginal lubrication secretion relative to younger females.

(.1) True .2 False .3 Don't know

6. The aged female takes longer to achieve adequate vaginal lubrication relative to younger females.

(.1) True .2 False .3 Don't know

7. The older female may experience painful intercourse due to reduced elasticity of the vaigna and reduced vaginal lubrication.

(.1) True .2 False .3 Don't know

8. Sexuality is typically a life-long need.

(.1) True .2 False .3 Don't know

* Indicates that the scoring should be reversed such that 2=1, and 1=2, i.e., a low score indicates high knowledge

Table 2 (Continued)

9. Sexual behavior in older people (65+) increases the risk of heart attack.

.1 True (.2) False .3 Don't know

*10. Most males over the age of 65 are unable to engage in sexual intercourse.

.1 True (.2) False .3 Don't know

11. The relatively most sexually active younger people tend to become the relatively most sexually active people.

(.1) True .2 False .3 Don't know

12. There is evidence that sexual activity in older persons has beneficial physical effects on the participants.

(.1) True .2 False .3 Don't know

13. Sexual activity may be psychologically beneficial to older person participants.

(.1) True .2 False .3 Don't know

*14. Most older females are sexually unresponsive.

.1 True (.2) False .3 Don't know

15. The sex urge typically increases with age in males over 65.

(.1) True .2 False .3 Don't know

16. Prescription drugs may alter a person's sex drive.

(.1) True .2 False .3 Don't know

*17. Females, after menopause, have a physiologically induced need for sexual activity.

.1 True (.2) False .3 Don't know

18. Basically, changes with advanced age (65+) in sexuality involve a slowing of response time rather than a reduction of interest in sex.

(.1) True .2 False .3 Don't know

Table 2 (Continued)

19. Older males typically experience a reduced need to ejaculate and hence may maintain an erection of the penis for a longer time than younger males.

(.1) True .2 False .3 Don't know

*20. Older males and females cannot act as sex partners as both need younger partners for stimulation.

.1 True (.2) False .3 Don't know

21. The most common determinant of the frequency of sexual activity in older couples is the interest or lack of interest of the husband in a sexual relationship with his wife.

(.1) True .2 False .3 Don't know

22. Barbiturates, tranquilizers, and alcohol may lower the sexual arousal levels of aged persons and interfere with sexual responsiveness.

(.1) True .2 False .3 Don't know

23. Sexual disinterest in aged persons may be a reflection of a psychological state of depression.

(.1) True .2 False .3 Don't know

24. There is a decrease in frequency of sexual activity with older age in males.

(.1) True .2 False .3 Don't know

25. There is a greater decrease in male sexuality with age than there is in female sexuality.

(.1) True .2 False .3 Don't know

26. Heavy consumption of cigarettes may diminish sexual desire.

(.1) True .2 False .3 Don't know

27. An important factor in the maintenance of sexual responsiveness in the aging male is the consistency of sexual activity throughout his life.

(.1) True .2 False .3 Don't know

Table 2 (Continued)

28. Fear of the inability to perform sexually may bring about an inability to perform sexually in older males.

(.1) True .2 False .3 Don't know

29. The ending of sexual activity in old age is most likely and primarily due to social and psychological causes rather than biological and physical causes.

(.1) True .2 False .3 Don't know

*30. Excessive masturbation may bring about an early onset of mental confusion and dementia in the aged.

.1 True (.2) False .3 Don't know

*31. There is an inevitable loss of sexual satisfaction in post-menopausal women.

.1 True (.2) False .3 Don't know

32. Secondary impotence (or non-physiologically caused) increases in males over the age of 60 relative to younger males.

(.1) True .2 False .3 Don't know

33. Impotence in aged males may literally be effectively treated and cured in many instances.

(.1) True .2 False .3 Don't know

34. In the absence of severe physical disability males and females may maintain sexual interest and activity well into their 80's and 90's.

(.1) True .2 False .3 Don't know

35. Masturbation in older males and females has beneficial effects on the maintenance of sexual responsiveness.

(.1) True .2 False .3 Don't know

+ Attitude Questions: (7 point Likert Scale, Disagree = 1, Agree = 7)

Disagree Agree

1 2 3 4 5 6 7

Table 2 (Continued)

36. Aged people have little interest in sexuality. (Aged = 65+ years of age). _____

37. An aged person who shows sexual interest brings disgrace to himself/herself. _____

38. Institutions, such as nursing homes, ought not to encourage or support sexual activity of any sort in its residents. _____

39. Male and female residents of nursing homes ought to live on separate floors or separate wings of the nursing home. _____

40. Nursing homes have no obligation to provide adequate privacy for residents who desire to be alone, either by themselves or as a couple. _____

41. As one becomes older (say past 65) interest in sexuality inevitably disappears. _____

For items 42, 43 & 44:

If a relative of mine, living in a nursing home, was to have a sexual relationship with another resident I would:

42. Complain to the management. _____

43. Move my relative from this institution. _____

+44. Stay out of it as it is not my concern. _____

45. If I knew that a particular nursing home permitted and supported sexual activity in residents who desired such, I would not place a relative in that nursing home. _____

46. It is immoral for older persons to engage in recreational sex. _____

+47. I would like to know more about the changes in sexual functioning in older years. _____

+48. I feel I know all I need to know about sexuality in the aged. _____

49. I would complain to the management if I knew of sexual activity between any residents of a nursing home. _____

+50. I would support sex education courses for aged residents of nursing homes. _____

+51. I would support sex education courses for the staff of nursing homes. _____

Table 2 (Continued)

+52. Masturbation is an acceptable sexual activity for older males. _____

+53. Masturbation is an acceptable sexual activity for older females. _____

+54. Institutions, such as the nursing home, ought to provide large enough beds for couples who desire such to sleep together. _____

+55. Staff of nursing homes ought to be trained or educated with regard to sexuality in the aged and/or disabled. _____

56. Residents of nursing homes ought not to engage in sexual activity of any sort. _____

+57. Institutions such as nursing homes should provide opportunities for the social interaction of men and women. _____

58. Masturbation is harmful and ought to be avoided. _____

+59. Institutions, such as nursing homes, should provide privacy such as to allow residents to engage in sexual behavior without fear of intrusion or observation. _____

60. If family members object to a widowed relative engaging in sexual relations with another resident of a nursing home, it is the obligation of the management and staff to make certain that such sexual activity is prevented. _____

61. Sexual relations outside the context of marriage are always wrong. _____

+ Reverse scoring on items indicated such that 1=7, 7=1; 6=2, 2=6; 3=5, 5=3; 4 unchanged. A low score indicates a permissive attitude

Table 3

Means and Standard deviations of ASKAS Scores by group[2,4]

Group	n	Mean	S.D.
*Nursing Home residents:	273		
Attitudes -		84.56	23.32
Knowledge -		65.62	15.09
+Community Aged:	30		
Attitudes -		86.40	17.28
Knowledge -		73.73	12.52
+Families of Aged:	30		
Attitudes -		75.00	22.66
Knowledge -		78.00	13.61
+Persons who work with Aged:	30		
Attitudes -		76.00	17.60
Knowledge -		62.46	12.50
+Nursing Home staff:	163		
Attitudes -		61.08	25.79
Knowledge -		64.19	17.25

* (White, 1981)

+ (White and Catania, 1981)

Table 4

Factor Analysis of the ASKAS[3]

Varimax Rotation of Prinicpal Component Factors

		Varimax Factor Loading	
	Question	1 (Attitudes)	2 (Knowledge)
Knowledge	1	-.047	.256
	2	-.039	.420
	3	-.107	.507
	4	-.227	.419
	5	.088	.543
	6	.079	.590
	7	.102	.528
	8	.079	.383
	9	-.201	.284
	10	-.071	.372
	11	.042	.511
	12	.119	.592
	13	.199	.561
	14	-.051	.416
	15	-.029	.457
	16	.148	.381
	17	-.035	.513
	18	.071	.605
	19	.052	.515
	20	.024	.472
	21	.102	.465
	22	.029	.367
	23	.196	.558
	24	-.066	.492
	25	-.048	.536
	26	-.005	.296
	27	.100	.619
	28	.053	.647
	29	.115	.566
	30	-.110	.453
	31	.027	.403
	32	.149	.542
	33	.147	.492
	34	.159	.501
	35	.139	.494

Table 4 (Continued)

		Varimax Factor Loading	
	Question	1 (Attitudes)	2 (Knowledge)
Attitude	36	.294	.136
	37	.371	.107
	38	.480	.165
	39	.405	.077
	40	.415	.099
	41	.390	.148
	42	.569	-.012
	43	.554	-.034
	44	.394	.018
	45	.665	.029
	46	.624	-.074
	47	.232	-.188
	48	.674	-.003
	49	.680	-.015
	50	.221	-.178
	51	.242	-.140
	52	.668	.088
	53	.655	.063
	54	.667	.032
	55	.683	.029
	56	.782	.051
	57	.670	.065
	58	.674	-.006
	59	.763	.045
	60	.657	-.042
	61	.696	.010

References

Annon, J.S., and Robinson, C.H. (1978). The use of vicarious learning in the treatment of sexual concerns. In J. LoPiccolo and L. LoPiccolo (Eds.), Handbook of Sex Therapy. Plenum: New York, 35-53.

Blackwell, D., and Hunt, S. (1978). Staff attitudes toward sexual expression among aged nursing home residents. Paper presented at the 31st annual meeting of the Gerontological Society.

Blythe, R. (1979). The view in winter. New York: Harcourt, Brace, Jovanovich.

Brower, H., and Tanner, L. (1979). A study of older adults attending a program on human sexuality. Nurs. Res. 28:36-39.

Caldenone, M. (1976). Sexual health. In H. Leif and A. Karlen (Eds.), Sex Education in Medicine. New York: Spectrum publications.

Cameron, P. (1970). The generation gap: beliefs about sexuality and self-reported sexuality. Dev. psych. 3:272.

Comfort, A. (1976). To a good life. New York: Crown publishers.

Golde, P. and Kogan, N. (1959). A sentence completion procedure for assessing attitudes toward old people. Jrnl. of Geront. 14:355-363.

Hammond, D.I. (1979). An explanatory study of a workshop on sex and aging. Doctoral dissertation, University of Georgia.

Hinkley, N.E. (1979). Sexuality and aging: implications for long-term care. Paper presented at annual meeting of the Gerontological Society.

Kinsey, A.C., Pomeroy, W.B., and Martin, C.R. (1948a). Sexual behavior in the human male. Philadelphia: W.B. Saunders.

Kinsey, A.C., Pomeroy, W.B., and Martin, C.R. (1948b). Sexual behavior in the human female. Philadelphia: W.B. Saunders.

Leif, H., and Karlen, A. (1976). Sex education in Medicine. New York: Spectrum books.

Masters, W.H., and Johnson, V.E. (1966). Human sexual response. Boston: Little, Brown, and Co.

Masters, W.H., and Johnson, V.E. (1970). Human sexual inadequacy. Boston: Little, Brown, and Co.

Newman, G., and Nichols, C. (1960). Sexual activities and attitudes in older persons. J. of Amer. Med. Assoc. 173:33-35.

Pfeiffer, E., Verwoerdt, A., and Wang, H. (1968). Sexual behavior in aged men and women. Arch. of Gen. Psychiat. 19:756-758.

Verwoerdt, A., Pfeiffer, E., and Wang, H. (1969). Sexual behavior in senescence. Geriatrics, 24:137-154.

White, C.B., Catania, J. (1981). Sexual education for aged people, people who work with the aged, and families of aged people. In press, Intl. Jrnl. of aging and Human Dev.

White, C.B. (1981). Interest, attitudes, knowledge, and sexual history in relation to sexual behavior in the institutionalized aged. In press, Arch. of Sex. Behav.